

LIQUID SOAP DISPENSER

BACKGROUND OF THE INVENTION

5 I. Field of the Invention

This invention relates generally to a liquid soap dispenser and, more specifically, to a liquid soap dispenser that *interlocks the stationary base, the main body and the cover for better anti-theft and water anti-permeation effect.*

10 II. Description of the Prior Art

Heretofore, it is known that the structure a liquid soap dispenser (as shown in FIG 6) consists of a main body (70) and a fixing base (80) nailed on wall; the main body (70) further consists of a transmission mechanism on base, top portion is the storage of the liquid soap, a cover (72) is on top of the main body (70), a fastening slot (71) is on the lower back portion of the main body (70); the fixing base (80) is a small board with several lock hole (82) on sides for screws to pass through, a fastener (81) is on the center of the fixing base (80).

The fixing base (80) is fixed on wall with screws on the lock hole (82), the main body (70) filled up with liquid soap is fixed on the fastener (81) of the fixing base (80) with the fastening slot (71) to combine the two structures.

However the above mechanism contains following deficiencies:

1. No special locking device installed between the main body (70) and the fixing base (80); anyone can just pull up the main body (70) from the fixing base (80) easily.
2. The cover (72) of the main body (70) does not have locking device, the liquid soap inside might be mixed with other materials purposely; the cover (72) is a flat plate, no sealing and water-blocking design, dirty water will permeate in that causes contamination.
3. Some cleaners and detergents contain alcohol or scent materials, if the cover (72) and the main body (20) are not sealed closely, alcohol and scent materials will evaporate

after sometimes, the scent smell and sterilizing effect will degrade.

4. No fixing mechanism for the cover (72), when the cover (72) is lifted for refill, the cover (72) might drop accidentally due to gravity or minor touch that causes inconvenience during refill of liquid soap.

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SUMMARY OF THE INVENTION

It is therefore a primary object of the invention to provide a liquid soap dispenser to solve the deficiencies mentioned above and easy to combine, better anti-theft effect, better water-proof effect.

In order to achieve the objective set forth, a liquid soap dispenser in accordance with the present invention comprises a stationary base and a main body with a cover. A fastener is on the bottom of the stationary base, a concave is on top of the stationary base, a blocking board is on top of the concave, a holding hole with an open on top locates on the concave; the main body is in box shape with a "T" shape pillar on the back, a slot is on the bottom of the back of the main body; an inner brim is on the top of the main body to fit the inner cover; a protruding rib is on the back of the cover, a blocking brim surrounds the cover, a lock hole locates on the front of the blocking brim, a lock is inside the lock hole to lock the cover and the stationary base, the cover and the stationary base are further fastened with the protruding rib, the main body and the stationary base are interlocked with the "T" shape pillar and the fastener, the slot two fastening mechanisms, the interlock structure is best for anti-theft effect.

BRIEF DESCRIPTION OF THE DRAWINGS

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The accomplishment of the above-mentioned object of the present invention will become apparent from the following description and its accompanying drawings which disclose illustrative an embodiment of the present invention, and are as follows:

FIG 1 is a perspective view of the present invention;

FIG 2 is an assembly view of the present invention;

FIG 3 is a cross-sectional view of the present invention;

FIG 4 is another cross-sectional view of the present invention;

5 FIG 5 is an assembly cross-sectional view the present invention;

FIG 6 is a perspective view with the prior art.

DESCRIPTION OF THE PREFERRED EMBODIMENT

10 Referring to FIG 1, FIG 2 and FIG 3, the present invention is composed of a stationary base (10) and a main body (20) with a cover (30). The stationary base (10) is slightly larger than the main body (20), a fastener (16) is on the bottom, a spring shape tenon (17) located on top of the fastener (16); a concave (13) is on top of the stationary base (10), a blocking board (14) is on top of the concave (13), a holding hole (15) with an
15 open (150) on top locates on the concave (13), a concave area (11) is on the center of the stationary base (10), several nail hole (12) are on the concave area (11).

The main body (20) is in box shape with a "T" shape pillar (21), a protruding hook (22) is on the lower portion of the cover (30), a slot (23) is on the bottom of the back of the main body (20); an inner brim (24) is on the top of the main body (20) to fit the inner
20 cover (40).

A protruding rib (31) is on the back of the cover (30), a blocking brim (32) surrounds the cover (30); a lock hole (320) locates on the front of the blocking brim (32), a lock (50) is inside the lock hole (320).

A blocking plate (41) is on the front of the inner cover (40) so that the blocking plate
25 (41) can cover the inner side the lock (50) of the cover (30) when the inner cover (40) is on the inner brim (24) of the main body (20), water will not come in to cause contamination.

Referring to FIG 2 and FIG 3, the cover (30) has to be opened first to install main body (20) to the stationary base (10), as shown in FIG 3, when the cover (30) lifts, the

protruding rib (31) inserts into the protruding hook (22); referring to FIG 2, FIG 3 and FIG 4, the stationary based (10) is installed and fixed on wall with nails passing through nail hole (12). The main body (20) attaches to the holding hole (15) from top to down of the open (150) with the "T" shape pillar (21), at the same time, the slot (23) is also installed onto the fastener (16); as shown in FIG 4, the cover (30) is pushed down, at the same time, the protruding rib (31) on the back can push the inner brim of the blocking board (14) from the concave (13), the blocking brim (32) of the cover (30) covers the upper brim of the main body (20), janitors can lock the lock (50) and main body (20) together with a key (51), now the stationary base (10), main body (20) and the cover (30) are fastened together for anti-theft effect.

When users want to disassemble the device, as shown in FIG 5, users apply the key (51) to unlock the lock (50), lift the cover (30), press the spring shape tenon (17) on the bottom of the stationary base (10) with a screw driver (60), the main body (20) can be separated from the stationary base (10).

Referring to FIG 5, when the cover (30) is lifted up from the main body (20), as shown in FIG 3, the protruding rib (31) on the back of the cover (30) stems inside the protruding hook (22) and remains stable with the main body (20), when the users refill the liquid soap, the cover (30) remains open, such mechanism is very convenient.

The present invention has following advantages:

1. The lock (50) can lock the main body (20) and the cover (30), the protruding rib (31) can fasten the cover (30) and the stationary base (10), the "T" shape pillar (21) and fastener (16), the slot (23) two fastening mechanisms to fix the main body (20) and the stationary base (10), all the components are interlocked for best anti-theft effect.
2. The blocking brim (32) surrounding the cover (30) can seal the upper part of the main body (20) from water, the lock (50) on the blocking brim (32) also prevent water from permeating into liquid soap.
3. The inner cover (40) of the main body (20) can prevent the evaporation of alcohol and scent materials inside the cleaners that prolong the effectiveness of the cleaners.
4. The protruding rib (31) on the back of the cover (30) not only fasten the stationary

base (10) and the main body (20) but also inserts into the protruding hook (22) when the cover (30) is lifted to make the cover (30) stable that make the refill operation very convenient.

While a preferred embodiment of the invention has been shown and described in
5 detail, it will be readily understood and appreciated that numerous omissions, changes and additions may be made without departing from the spirit and scope of the invention.